CYCLICAL ENVIRONMENTAL CHANGES DURING THE PLIOCENE IN NE SPAIN: THE CAMP DELS NINOTS MAAR RECORD

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High-resolution pollen analysis has been carried out on a sediment core taken from the Pliocene Camp del Ninots maar site, Girona, NE Spain. Cyclical variations have been observed in the pollen record, with periods characterized by the abundance of *Abies*, *Larix*, *Cathaya*, *Tsuga*, *Engelhardia*, *Alnus and Botryococcus* algae, alternating with periods characterized by abundant Poaceae, Cupressaceae, Ericaceae, *Quercus* and Oleaceae, most-likely representing humid and dry conditions respectively. The pollen variations seem to correlate very well with sedimentological changes, depicted by the lithology and magnetic susceptibility (MS) records. Humid periods correspond to low MS and dark clays, which are probably related to higher lake level, productivity and organic sedimentation in the lake. A cyclostratigraphic analysis on the observed cyclicity in the pollen record will help us understand the forcing mechanism of this cyclical variations and will also help us improve the chronostratigraphic framework for the sediments contained in this very interesting site.